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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/528,167

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Pieter Paul Marc Van Hoecke

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EXAMINER

SAYALA, CHHAYA D

ART UNIT

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1794

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/528,167	Applicant(s) VAN HOECKE ET AL.	
	Examiner C. SAYALA	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 03 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/48474 taken with Orban (US Patent 4054677) and Meheus et al. (US Patent 6096353) in view of Ernster (US Patent 4973488), Armbruster et al. (US Patent 3849194) and Branen et al. ("Food Additives" published 2001, CRC Press, page 793).

WO '474 teaches a calf milk replacer that includes wheat gluten and maltodextrin, in amounts 1-20 parts of wheat gluten (claim 1 and claim 2) . The maltodextrin has a DE of 10-35 in an amount 90-10%. Orban teaches proteinic substance in the milk replacer in an amount 20-95%, fats 0-45%, carbohydrates 1-60%. The protein is hydrolyzed, mineral salts obtained during such hydrolysis are assimilated in the milk, and hydrated lime is used as part of the hydrolysis. See col. 2, lines 30+. The patent also discloses the addition of amino acids such as methionine, lysine and tryptophan, etc. (col. 4, line 47). The mineral salts include salts of calcium, phosphorous and sodium (col. 3, lines 60-65). Col. 4 discloses the process steps of blending, hydrolyzing, increasing the dry content, addition of amino acids and emulsifying with fat and finally, drying to obtain the final product. Meheus et al. also disclose a calf milk replacer, shown at col. 8 which contains lysine, threonine and

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tryptophan. Note the amounts of these amino acids which overlap with those claimed.

The patent which uses wheat protein (gluten) states at col. 4, line 40 that the protein content is 18-22 wt%.

These three references establish collectively, that the ingredients that applicant claims are commonly used in milk replacers. The amounts also appear to be obvious from such disclosures. What these references do not teach is the low Maltodextrin DE values claimed herein, although WO '474 teaches a DE value of 10 which overlaps with the end point of some of the claims. The patents also do not teach using a ring dryer in the process, for drying.

Using ring dryers are already known in the art, particularly for hydrolyzed proteinaceous milk materials as shown in Ernster at col. 8, lines 34-37. This method of drying is shown as being functionally equivalent to other types of drying methods shown at lines 36-37. (See specification at page 9, lines 13-17). To incorporate such a dryer in the primary references would have been prima facie obvious, absent any criticality in this regard.

With regard to the values of DE being lower than 10 in some of the instant claims, according to Armbruster et al. at col. 1, lines 20-26, state the following benefits:

"There is a large potential market for syrups and syrup solids with bland taste, low sweetness and low hygroscopicity at a low DE level. Such syrups, hydrolysates and syrup solids are useful as bases for the preparation of food items as well as for bodying agents and as additives having non-sweet, water-holding, non-hygroscopic characteristics. Other applications include use as a carrier for synthetic sweeteners, as a flavor enhancer, as an additive for coloring agents, as a spray drying adjunct for coffee extracts or tea extracts, as a bulking or bodying dispersing agent in **synthetic creams or coffee whiteners**, as a

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moisture holding agent in breads, pastries, meats, and as a bodying and smoothing agent in puddings, soups and frozen iced desserts." [Emphasis added].

Branen et al. also state as follows with regard to maltodextrins with low D.E.:

"In some instances a maltodextrin may be added to assist with stickiness (tackiness). This is best done with very low DE (<5) maltodextrin products. These same maltodextrins have proven to provide fatlike properties. Because of blandness and solubility of maltodextrins, they are very compatible with the incorporation of instant starches."

Note the table which shows that low DE maltodextrins have high viscosity and low hygroscopicity, both beneficial when used in an emulsion.

Therefore, not only is the use maltodextrins of low DE well-known in the art, their benefits have been well established, so that their incorporation into the primary reference that already teaches maltodextrins upto a value of DE=10, would not have been without motivation, and such would have been obvious to one of ordinary skill in the art at the time the invention was made.

Response to Arguments

Applicant's arguments filed 11/3/08 have been fully considered but they are not persuasive.

Applicant has pointed out that the wheat gluten in WO '474 is in fact 1-20 parts. The action has been corrected accordingly. Applicant states that maltodextrin is in an amount 8-20 parts, see page 3 of his remarks. This is disagreed with, since the patent

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actually discloses an amount 90-10% maltodextrin (see abstract, claim 1). With regard to applicant's pointing to the facts in Atofina, while the examiner is well aware of the facts of that decision, the fact situation over there is quite different from these facts, for instance the rejection here was made under 35 USC 103 and not under 35 USC 102.

At page 4, applicant continues traversing the WO patent stating now that the patent shows a preferred embodiment of the DE being between 12 and 20.

It has been well established that all of the disclosure must be considered not just the specific examples, *In re Uhlig*, 153 USPQ 460. The "non-preferred" as well as the "preferred" portion of a reference is pertinent for what it teaches to one skilled in the art. *In re Meinhardt*, 157 USPQ 270 (CCPA 1968). It follows therefore, that disclosure in any part of the patent, not just the claims or the examples, places the subject matter of the claims in the possession of the artisan having ordinary skill in the art and renders it obvious.

At page 4, applicant states that while the WO patent shows a protein amount 1-20 parts, Orban teaches greater than 20% and this renders the patent inconsistent with Orban. This reasoning defies logic. The WO patent teaches a protein amount 1-**20**%, Orban teaches an amount **20**-95%. The instant claims recite an amount **20**-70%. So as long as the end points overlap, the references cannot be said to be 'inconsistence'. It is important here to note the MPEP § 2144.05:

"Similarly, a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v.*

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Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (Court held as proper a rejection of a claim directed to an alloy of "having 0.8% nickel, 0.3% molybdenum, up to 0.1% iron, balance titanium" as obvious over a reference disclosing alloys of 0.75% nickel, 0.25% molybdenum, balance titanium and 0.94% nickel, 0.31% molybdenum, balance titanium.)."

Therefore, even if applicant were to argue that the end-points do not overlap, which of course, is not true, they are not so different that they somehow establish patentability of the instant claims.

At page 4, applicant states:

"The Armbruster patent simply makes low DE starches more **before** WO '474, Orban, and Meheus et al."

While this statement is not clear, applicant's statement that the WO patent, Orban or Meheus et al. does not involve low DE starches, and Armbruster does not specifically mention calf milk replacement and the disclosure of Armbruster is not related to the WO patents, or Orban or Meheus et al., is correct and these are the reasons for the rejection under 35 USC 103 and not 35 USC 102. If all of the limitations were to be shown by a single reference then the rejection would have been made under 35 USC 102. While the primary references teach milk replacers, and use DE levels not claimed herein, except for the WO patent which teaches the end point of the DE value, 10, the Armbruster patent teaches that low DE values provide non-sweet, water-holding, non-hygroscopic characteristics and if the patent teaches that such characteristics are useful in synthetic creamers, and there is no reason to believe that they would not

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provide the same characteristics and benefits to calf milk replacers and none has been provided by applicant. See *In re Hoeschele*, 406 F.2d 1403, 1406-07 (CCPA 1969)("[I]t is proper to take into account not only specific teachings of the references but also the inferences which one skilled in the art would reasonably be expected to draw therefrom..."). Additionally, Branen et al. teach that low DE values provide a fat-like characteristic and their blandness and solubility helps incorporation into food products. There is no argument to refute the position of the Office action that such characteristics would have been realized by the person of ordinary skill in the art when a low value DE maltodextrin is incorporated in calf milk replacer.). See also *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1361 (Fed.Cir. 2006). ("The motivation need not be found in the references sought to be combined, but may be found in any number of sources, including common knowledge, the prior art as a whole, or the nature of the problem itself.). This applies to applicant's arguments with regard to Ernster as well. Applicant states that the Ernster reference relates to hydrolyzed proteinaceous solid derived from milk which is low in fat content whereas the primary references disclose high fat content. Applicant also states(page 5): " Ernster apparently has primary reference from its mention of a ring dryer." First, Ernster is not a primary reference and second, the primary references have been reviewed and it is to be noted that only the WO patent and Meheus et al. disclose the presence of fat without disclosing any particular amounts while the Orban patent teaches a *low fat* content as recited in the instant claims. However, whether low fat or not, the disclosure of Ernster teaches that when a hydrolyzed proteinaceous solid is to be derived from milk, as in

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here, ring dryers have been used in prior art. Therefore, to use a ring dryer or any other dryer for that matter, would have been obvious with the reasonable expectation that a drying effect would have been realized by the skilled artisan. There is nothing of record that shows that by using a ring dryer over other dryers, an unexpected result was obtained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Sayala whose telephone number is (571) 272-1405. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. SAYALA/

Primary Examiner, Art Unit 1794